INTEGRATIVE EXPERIENTIAL LEARNING

A Key to Program Management Education Success

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Systems Management College (DSMC) has consistently provided one or more Program Management Course (PMC) capstone integrative experiential exercises. These exercises have been refined and revamped to adjust to changing world events and acquisition policy shifts.

The DSMC Integrative Program Management Department is unique in its all-encompassing use of integrative experiential learning. Integrative learning is critical for successful program management. It helps program managers (PMs) understand the tradeoffs and natural conflicts that arise as a result of functional interest. It provides functional managers with a better understanding of the interrelationships among different functions on any particular issue.

Integrative learning is defined as the learning which combines two or more functional disciplines; i.e., contract management, funds management, systems engineering, logistics management. Experiential learning is

defined by F. Gerald Brown as "learning how to perform a specific act or operation by doing it ('how to' learning); or learning complexities of a professional role by experiencing the milieu in which the role is performed and attempting to perform parts of the role (role socialization)."

Requiring Students to Take an Active Role

Experiential learning includes exercises beyond lecture/discussion such as simulation, case study, practical exercise, role play and critical incidents. They require students to take a more active role and participate with a higher level of commitment during the educational process.

The experiential learning cognitive domain has the major advantage of giving a student the opportunity to deal with Bloom's taxonomy in levels of comprehension, application, analysis, synthesis and evaluation.² The major disadvantage of experiential learning is that it is time-consuming. The main focus of the exercises should be on the process issues as proposed to the specific content of the topic at hand. All integrative experiential learning exercises build upon the students having knowledge-based func-

Mr. Fournier is a Professor of Engineering Management, Integrative Program Management Department, Defense Systems Management College. tional classes and on members of the class freely sharing their experiences in program management.

Currently, the PMC includes four types of integrative experiential learning lessons which are predominately integrative experiential learning in the PMC core curriculum. The four types are Industry Programs (IP), Program Management Decision Briefing (PMDB), Integrated Subjects (IS), Experiential Learning (EL), and Grand Slam (GS). Some other functional subject areas such as manufacturing management, principles of program management, and managerial development use integrative experiential learning along with other types of learning as a capstone to their other types of classes.

IP Students Organize the Program

The IP uses an outsider's perspective to examine a program and see the differences between government and contractor PMs. The IP students organize and run the program. The faculty role is administrative and facilitated learning. Its broad goals are to promote the understanding of industry's role in acquisition, production processes, and types of issues typically encountered during management, of real acquisition programs. It encourages considerable tailoring to their learning desires, goals and needs.

The PMDB is an individual exercise that requires students to create and present a decision briefing on an acquisition issue. It emphasizes a logical thought process and professional briefing skills. The PMDB encourages each student to research a chosen acquisition issue deeply.

The IS are faculty-organized topics concerning events after Milestone (MS) II. The two types are work-group, lesson-learned exercises and role-playing exercises. They utilize real and hypothetical system examples to promote the successful application of acquisition management. This in-

cludes a multiple disciplines approach to specific critical topics. The IS exercises are more involved in the leading and controlling aspects of program management.

Hypothetical Program Management Office (PMO)

The GS simulations are the most flexible and the longest exercises in the PMC curriculum. Students plan, organize and role play a hypothetical PMO from the pre-Concept Exploration Phase to shortly after MS II. The GS is wider in scope than IS; however, students obtain less shared depth in the understanding of issues.

In a specific GS, as all students cannot role play the PM, many students obtain detailed knowledge of operating in one functional area and a general understanding the responsibilities of other functional areas. The GS utilizes section outbriefs and role rotation to normalize the learning to the application level or above. The GS tends to be concentrated on the organizing and planning aspects of program management. The IS, IP and PMDB lessons learned should be used in planning a section's GS program. The GS is a unique exercise as it is one of the longest continuous program-management educational simulations in use.

The GS allows the following parameters that few other education exercises provide:

- Students must make and abide by their decisions in a fairly realistic, nonthreatening environment.
- Provides a chance to test current acquisition policy (i.e., the current GS is first to test many DoD acquisition initiatives for a simulated multiple-phase program).
- Provides an opportunity for students to work in an unfamiliar area and obtain a wider perspective by spending a few days "wearing someone else's shoes."

- Provides an opportunity for the inexperienced or junior-ranked students to experience being a PM.
- Provides a chance to explore different leadership styles, organization concepts and management strategies in a flexible, nurturing environment.

The GS reinforces good management practices, clarifles limitations of less-desirable management practices, and highlights challenges of the acquisition processes. It provides students with an opportunity to reflect on the differing demands of early phases in the acquisition life cycle.

In summary, these integrative experiential exercises are critical to the program-management education process. They provide students with a chance to take risks and apply new and different program-management techniques in a comfortable, nurturing classroom environment. The wisdom students obtain should improve management of future DoD programs.

Endnotes

- F. Gerald Browne, "Three Types of Experiential Learning: A Non-trivial Distinction," New Directions for Experiential Learning: Developing Experiential Learning Programs for Professional Education, Vol. 8 (San Francisco; Jossey-Bass Publishing, 1980), p. 14.
- 2. Ted Bloom, Using the Taxonomy of Educational Objectives, 1956, p. 37, "Comprehension is defined as the ability to grasp the meaning of material. Applications refers to the ability to use learned material in new and concrete situations. Analysis refers to the ability to break down material into its component parts so that its organizational structure may be understood. Synthesis refers to the ability to put parts together to form a new whole. Evaluation is concerned with the ability to judge and evaluate the value of material for a given purpose."